

Rock Island Arsenal
Magazine
(Building 280)
Sylvan Drive
Rock Island
Rock Island County
Illinois

HAER No. IL-20-0

HAER
ILL,
81-ROCIL,
3/280-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Department of the Interior
Washington, D.C. 20013-7127

HISTORIC AMERICAN ENGINEERING RECORD

ROCK ISLAND ARSENAL
MAGAZINE
(Building 280)
HAER No. IL-20 0

HAER
ILL.
81-2001L,
3/280-

Location: Sylvan Drive,
Rock Island Arsenal,
Rock Island,
Rock Island County, Illinois
UTM: 15.704050.4598380
Quad: Davenport East

Date of Construction: 1872-1873

Present Owner and Occupant: U.S. Army

Present Use: Magazine

Significance: After taking command of Rock Island Arsenal in 1865, General Thomas Jefferson Rodman devised a master plan for the installation calling for the construction of ten large manufacturing shops, five on each side of the island's major east-west thoroughfare. These core manufacturing structures were supplemented by a variety of administrative, residential, maintenance, storage, and utility buildings. Although only a few buildings were erected prior to Rodman's death in 1871, subsequent construction under Rodman's nineteenth-century successors closely conformed to the original plan.

Forming a cohesive architectural statement that is unique among Midwest government installations, the Rodman plan buildings are the administrative and technological core of Rock Island Arsenal, one of only two "old-line, nineteenth-century arsenals still in operation for munitions production. The buildings are vital for understanding the history of American ordnance development and manufacture from the Spanish American War to the present.

Situated in an isolated area on the southerwestern shore of the island, the Magazine was constructed under the general scope of the Rodman plan in 1872-1873. Although Rodman's successor, Colonel Daniel

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Webster Flagler, had plans to erect several other magazines at the arsenal, this structure was the only one built during the nineteenth century. It is part of the Rock Island Arsenal National Register Historic District.

Historian:

Jeffrey A. Hess, February 1985

Architectural Historian:

David Arbogast, February 1985

PART I. HISTORICAL INFORMATION

A. Physical History:

1. Date of erection: According to Colonel Daniel Webster Flagler, who succeeded General Thomas Jefferson Rodman as commandant in 1871, the construction site was selected in October 1871, and the Magazine was erected in 1872-1873 (Flagler, pp. 274-275).
2. Architect: Not known. Plans were probably prepared by Ordnance Department staff under the supervision of Flagler (Flagler, p. 260).
3. Original and subsequent owners: U.S. Army.
4. Builder: "All of the work . . . was done by day workmen, employed and paid by the Government. The work was directed and superintended directly by officers of the Ordnance Department stationed at the arsenal, and the necessary engineering work, calculations, making of tests, experiments, etc., was also done by the officers" (Flagler, p. 260).
5. Original plans and construction: No original plans or elevations have been located. The picture collection of the Rock Island Arsenal Historical Office has a photograph, originally published in 1898 (Tillinghast, p. 60), that shows the building in its present configuration (see HAER Photo No. IL-20 0-5).

B. Historical Context:

In October 1871, General A. B. Dyer, Chief of the Ordnance Department, visited Rock Island Arsenal and approved an isolated site on the southwestern shore of the island for the construction of three magazines. Only one was built. Erected in 1872-1873, the Magazine was "intended for the storage of fixed ammunition only" (Flagler, p. 275). It is possible, however, that it was later used for the storage of powder. The Rock Island Arsenal Engineering Plans and Services Division has an original drawing, dated 1889, for a freestanding "Magazine Rack for Powder Barrels" (see HAER Photo No. IL-20 0-6). In addition to elevations and a plan view of a powder barrel rack, the drawing also contains a plan view of the Magazine showing the proposed disposition of the storage racks. The building still serves as a magazine. It has been designated as "Building 280"

at least since World War II ("Industrial Facilities Inventory"; for additional documentation, see HAER No. IL-20).

Prepared by: Jeffrey A. Hess
MacDonald and Mack Partnership
February 1985

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. Architectural character: The building is a utilitarian, brick magazine with Classical detailing. It is one story tall on a limestone foundation.
2. Condition of fabric: The building is well-maintained and is in good condition.

B. Description of Exterior:

1. Overall dimensions: The building is rectangular, measuring 85' (8 bays) x 35' (3 bays). It is one story in height without basement or attic.
2. Foundations: Rock-faced ashlar limestone below a cut limestone water table (HAER) Photo Nos. IL-20 0-1 and IL-20 0-2).
3. Walls: Tan brick (HAER Photo Nos. IL-20 0-1 and IL-20 0-2) laid in running bond. Bays are defined by brick pilasters rising from the water table to a brick entablature supporting a flat, brick frieze.
4. Structural systems: Brick bearing walls and six interior columns (HAER Photo No. IL-20 0-3) within copper sheet metal sleeves. Poured concrete floor slab on grade. The ceiling (HAER Photo No IL-20 0-3) is wrought-iron joists and stringers with brick vaulting between. The rectangular section defined inside the six columns has sharply pitched elliptical vaulting and the ceiling surrounding this area has shallow vaulting. The roof system is unknown, being inaccessible.
5. Chimneys: There are two pseudo-chimneys (HAER Photo Nos. IL-20 0-1 and IL-20 -0-2) located at each end of the main roof ridge. They are sheet copper formed as small, square chimneys with Classical, flaring caps. These pseudo-chimneys serve the ventilation system of the building.

6. Openings:

- a. Doorways: There are two, large, primary doorways centered in the north and south elevations. The south doorway (HAER Photo No. IL-20 0-1) contains a pair of large, hinged, modern, wood, slab doors with an overhead door immediately behind them. The north doorway (HAER Photo Nos. IL-20 0-2 and IL-20 0-3) retains its original opening and doors. It contains a pair of vertical, beaded, tongue-and-groove, binged, board doors. The interior retains an unpainted wide, plain, board cssing.
- b. Windows: Single window openings (HAER Photo Nos. IL-20 0-1 and IL-20 0-2) sre located flanking the two doorways. They have cut limestone flat sill and lintel blocks and brick jambs. Modern plywood boards painted white fill the exterior of the openings. Inside, the openings contain eight-over-eight, double-hung, wood sash (HAER Photo No. IL-20 0-3). Centered at the top of each side bay and above the upper corners of the window lintels are small, rectangular ventilation holes with copper grilles (HAER Photo Nos. IL-20 0-1 and IL-20 0-2).

7. Roof:

- a. Shape, covering: The roof (HAER Photo Nos. IL-20 0-1 and IL-20 0-2) is a simple hip covered with black asphalt shingling. The ridges are capped with pressed copper in the form of clay ridge tiles. There are four copper lightning rods slong the main roof ridge.
- b. Cornice, esves: The cornice and eaves (HAER Photo Nos. IL-20 0-1 and IL-20 0-2) are pressed copper in imitation of cut stcne. There are no gutters or leaders.

C. Interior Description:

1. Floor plans: The floor plan (HAER Photo No. IL-20 0-6) consists of a single, large storage room.
2. Flooring: Poured concrete slab (HAER Photo No. IL-20 0-3).
3. Wall and ceiling finishes: The walls are covered with wide, unpainted, horizontal, beaded, tongue-and-groove board siding (HAER Photo Nos. IL-20 0-3 and IL-20 0-4). The ceiling (HAER Photo No. IL-20 0-3) has iron joists and stringers with plastered brick vaulting painted white.
4. Openings:
 - a. Doorways and doors: No interior doorways or doors.

- b. Windows: The window openings (HAER Photo Nos. IL-20 0-3 and IL-20 0-4) have unpainted, plain, wide board casings matching that of the north doorway.

5. Mechanical equipment:

- a. Lighting: Although no artificial lighting was probably used originally, there are eight incandescent electric fixtures on the ceiling (HAER Photo No. IL-20 0-3).

D. Site:

General setting and orientation: The building is aligned north-south and is located in a relatively remote section of the south-west area of the arsenal north of Sylvan Drive and west of a set of railroad tracks. The nearest major building is Building 299, a warehouse, to the east. The site is relatively level and treeless.

Prepared by: David Arbogast
Architectural Conservator
February 1985

PART III. SOURCES OF INFORMATION

A. Original Architectural Drawings:

The Rock Island Arsenal Engineering Plans and Services Division has an original drawing (see HAER No. IL-20 0-6) bearing the following description: "Magazine Rack for Powder Barrels / Rock Island Arsenal/ August 15, 1889, D40040C." The drawing provides evidence that the Magazine may have been used for powder storage.

B. Early Views:

The picture collection in the Rock Island Arsenal Historical Office contains a photograph (see HAER No. IL-20 0-5), originally published in 1898 (Tillinghast, p. 60), that shows the building in its present configuration.

C. Bibliography:

1. Primary and unpublished sources:

Hess, Jeffrey A., and Mack, Robert C. "Historic Properties Report Rock Island Arsenal, Rock Island, Illinois". Prepared by MacDonald and Mack Partnership, and Building Technology Incorporated for the Historic American Buildings Survey/Historic American Engineering Record, National Park

Service, U.S. Department of the Interior, 1985. The report, with accompanying inventory cards, is filed as field records in the Prints and Photographs Division, Library of Congress, under HAER No. IL-20.

"Industrial Facilities Inventory, Rock Island Arsenal."
Prepared by U.S. Army Corps of Engineers, Rock Island District, 1946. Rock Island Arsenal Engineering Plans and Services Division. Lists building as "Building 280."

Real Property Cards, Rock Island Arsenal Engineering Plans and Services Division. Briefly describes building's structural characteristics and provides sketchy history of maintenance operations.

2. Secondary and published sources:

Bouilly, Robert. "Arsenal Island." Joined by a River: Quad Cities, ed. Frederick I. Anderson. N. pl.: Lee Enterprises, Incorporated, 1982. Excellent historical analysis of the arsenal's development to about 1910, written by a historian in the Rock Island Arsenal Historical Office.

Flagler, D[aniel] W[ebster]. A History of the Rock Island Arsenal from Its Establishment in 1863 to December 1876. Washington, D.C.: Government Printing Office, 1877. Provides detailed description of original Rodman plan for the arsenal and documents construction date for Magazine.

Nothstein, Ira O. and Stephens, Clifford W. A History of Rock Island Arsenal from Earliest Times to 1954. Rock Island: U.S. Army, Rock Island Arsenal, 1965. 3 vols. Rock Island Arsenal Historical Office. The best account of the arsenal's general operations.

Tillinghast, B. F. Rock Island Arsenal: In Peace and in War. Chicago: The Shepard Company, 1898. Reproduces photograph showing building's present configuration.

D. Likely Sources Not Yet Investigated:

Record Group 156 at the National Archives contains correspondence on the construction and operation of Rock Island Arsenal from 1871 to 1903. This material is also available on 216 reels of microfilm at the Browning Museum, Rock Island Arsenal.

PART IV. PROJECT INFORMATION

This project was part of a program initiated through a memorandum of agreement between the National Park Service and the U.S. Department of the Army. Stanley J. Fried, Chief, Real Estate Branch of Headquarters DARCOM, and Dr. Robert J. Kapsch, Chief of the Historic American Buildings Survey/Historic American Engineering Record, were program directors. Sally Kress Tompkins of HABS/HAER was program manager, and Robie S. Lange of HABS/HAER was project manager. Building Technology Incorporated, Silver Spring, Maryland, under the direction of William A. Brenner, acted as primary contractor, and MacDonald and Mack Partnership, Minneapolis, was a major subcontractor. The project included a survey of historic properties at Rock Island Arsenal, as well as preparation of an historic properties report and HABS/HAER documentation for 38 buildings. The survey, report, and documentation were completed by Jeffrey A. Hess, historian, Minneapolis; Barbara E. Hightower, historian, Minneapolis; David Arbogast, architectural historian, Iowa City, Iowa; and Robert C. Mack, architect, Minneapolis. The photographs were taken by Robert A. Ryan, J. Ceronie, and Bruce A. Harms of Dennett, Muessig, Ryan, and Associates, Ltd., Iowa City, Iowa. Drawings were produced by John Palmer Low, Minneapolis.